

***Nicotiana attenuata* Torr.**
coyote tobacco
Solanaceae (Nightshade Family)

Status: State Sensitive

Rank: G4S2

General Description: Glandular-pubescent, heavily odorous annual 12-40 inches tall; leaves entire, the lowermost petiolate and with lance-ovate to elliptic blade 1-5 inches long and ½ to 2 inches wide, the others progressively reduced and relatively narrower upward; flowers more or less numerous in an elongate, subnaked, mixed panicle; calyx 5-toothed, the teeth triangular, unequal, the longer ones 1/16 to 3/16 inch long, much shorter than the tube; corolla vespertinal, dirty white, long slender tube, flaring into a circular limb, 1 to 1½ inch long, the limb 5/16 to ½ inch wide when expanded; capsule ovoid, 2-locular, 4-valved, about ¾ inch long, partly enclosed by the slightly increased calyx tube.

Identification Tips: *Nicotiana attenuata* is easily recognized by its glandular foliage and white, tubular flowers. It is likely to be confused only with the non-native species *Nicotiana acuminata*, which occurs in similar habitat. The latter can be distinguished by flowers with a much larger corolla and longer calyx limbs.

Phenology: Blooms June through September.

Range: Southern British Columbia and Northern Idaho and Montana to Baja CA, New Mexico and northwest Mexico, east of the Cascades. In Washington, *Nicotiana attenuata* has a scattered distribution, with present occurrences known from Douglas, Grant, Kittitas, Klickitat, and Yakima counties. Historic sites are known from Chelan and Franklin counties. Occurs in the Eastern Cascades and Columbia Basin physiographic provinces.

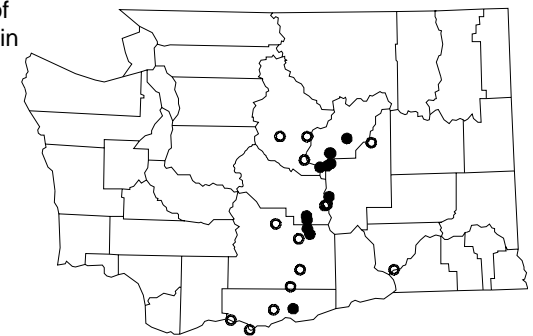
Habitat: Dry, sandy bottom lands, dry rocky washes, and in other dry open places. In Washington, *Nicotiana attenuata* has been reported to occur with giant wildrye (*Elymus cinereus*), knapweed (*Centaurea diffusa*), Russian thistle (*Salsola kali*), speedwell (*Veronica americana*), common mullein (*Verbascum thapsus*), cut-leaved nightshade (*Solanum triflorum*), cheatgrass (*Bromus tectorum*), horehound (*Marrubium vulgare*), doorweed (*Polygonum aviculare*), crested wheatgrass (*Agropyron cristatum*), small-flowered gilia (*Gilia minutiflora*), eriastrum

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Known distribution of
Nicotiana attenuata in
Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat (continued): (*Eriastrum sparsiflorum*), corrugate-seeded spurge (*Euphorbia glyptosperma*), matted nama (*Nama densum*), bracted verbena (*Verbena bracteata*), yarrow (*Achillea millefolium*) and mentzelia (*Mentzelia laevicaulis*), cudweed (*Gnaphalium* sp.), sweet-clover (*Melilotus* sp.), and sow-thistle (*Sonchus* sp.). Elevation ranges from 400 to 10,000 feet.

Ecology: *Nicotiana attenuata* occurs in areas that are prone to periodic disturbances, caused either by erosion or by human activities.

State Status Comments: The species occurs in areas that receive periodic natural disturbances. Due to the amount of disturbance to its habitat, both natural and human-caused, *Nicotiana attenuata* is associated with several aggressive exotic species that have invaded the habitat and presumably compete for resources. This, combined with the relatively large number of historical collections of the taxon in Washington and the few currently known sites, suggests that the species may be in decline in the state.

Inventory Needs: Systematic inventory throughout eastern WA should be undertaken.

Threats and Management Concerns: Threats include activities in and near *Nicotiana attenuata* habitat that have increased erosion, including livestock overgrazing, agriculture, military training activities, off-road vehicle use, herbicide spraying and road maintenance. The primary past threat from these activities was the invasion of exotic species into the habitat.

Comments: This species was apparently widely used for smoking by many Native American groups.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1959. *Vascular Plants of the Pacific Northwest, Part 4: Ericaceae though Campanulaceae*. University of Washington Press, Seattle. 510 pp.